

## CLAIMS

What is claimed is:

1. A method of treating, managing or preventing a specific cancer, which comprises administering to a patient in need of such treatment, management or prevention a therapeutically or prophylactically effective amount of thalidomide, or a pharmaceutically acceptable salt, solvate, or stereoisomer thereof.
2. A method of treating, managing or preventing a specific cancer, which comprises administering to a patient in need of such treatment, management or prevention a therapeutically or prophylactically effective amount of thalidomide, or a pharmaceutically acceptable salt, solvate, or stereoisomer thereof, and a therapeutically or prophylactically effective amount of a second active ingredient, radiation therapy, hormonal therapy, biological therapy or immunotherapy.
3. A method of treating, managing or preventing a disease associated with undesired angiogenesis, which comprises administering to a patient in need of such treatment, management or prevention a therapeutically or prophylactically effective amount of thalidomide, or a pharmaceutically acceptable salt, solvate, or stereoisomer thereof.
4. A method of treating, managing or preventing a disease associated with undesired angiogenesis, which comprises administering to a patient in need of such treatment, management or prevention a therapeutically or prophylactically effective amount of thalidomide, or a pharmaceutically acceptable salt, solvate, or stereoisomer thereof, and a therapeutically or prophylactically effective amount of a second active ingredient.
5. The method of claim 1, wherein the cancer is spinal cord tumor, pheochromocytoma, advanced malignancy, amyloidosis, neuroblastoma, meningioma, hemangiopericytoma, multiple brain metastase, glioblastoma multiforms, glioblastoma, brain stem glioma, poor prognosis malignant brain tumor, malignant glioma, anaplastic astrocytoma, anaplastic oligodendroglioma, neuroendocrine tumor, rectal adenocarcinoma, Dukes C & D colorectal cancer, unresectable colorectal carcinoma, metastatic hepatocellular carcinoma, Kaposi's sarcoma, karotype acute myeloblastic leukemia, Hodgkin's lymphoma, non-Hodgkin's lymphoma, cutaneous T-Cell lymphoma, cutaneous B-Cell lymphoma, diffuse large B-Cell lymphoma, low grade follicular lymphoma, localized or metastatic melanoma, peritoneal carcinoma, papillary serous carcinoma, gynecologic sarcoma, soft tissue sarcoma, scleroderma, cutaneous vasculitis, Langerhans cell histiocytosis, leiomyosarcoma, fibrodysplasia ossificans progressive, hormone

refractory prostate cancer, resected high-risk soft tissue sarcoma, unresectable  
hepatocellular carcinoma, Waldenstrom's macroglobulinemia, smoldering myeloma,  
indolent myeloma, fallopian tube cancer, androgen independent prostate cancer, androgen  
dependent stage IV non-metastatic prostate cancer, hormone-insensitive prostate cancer,  
5 chemotherapy-insensitive prostate cancer, papillary thyroid carcinoma, follicular thyroid  
carcinoma, medullary thyroid carcinoma, or leiomyoma.

6. The method of claim 2, wherein the cancer is spinal cord tumor,  
pheochromocytoma, advanced malignancy, amyloidosis, locally advanced bladder cancer,  
metastatic transitional cell bladder cancer, relapsed brain tumor, progressive brain tumor,  
10 neuroblastoma, meningioma, hemangiopericytoma, multiple brain metastase, glioblastoma  
multiforms, glioblastoma, brain stem glioma, poor prognosis malignant brain tumor,  
malignant glioma, anaplastic astrocytoma, anaplastic oligodendroglioma, metastatic breast  
cancer, neuroendocrine tumor, rectal adenocarcinoma, Dukes C & D colorectal cancer,  
unresectable colorectal carcinoma, metastatic hepatocellular carcinoma, Kaposi's sarcoma,  
15 karotype acute myeloblastic leukemia, Hodgkin's lymphoma, non-Hodgkin's lymphoma,  
cutaneous T-Cell lymphoma, cutaneous B-Cell lymphoma, diffuse large B-Cell lymphoma,  
low grade follicular lymphoma, localized or metastatic melanoma, stage IIIB non-small cell  
lung cancer, multiple myeloma, peritoneal carcinoma, papillary serous carcinoma,  
gynecologic sarcoma, soft tissue sarcoma, scleroderma, cutaneous vasculitis, Langerhans  
20 cell histiocytosis, leiomyosarcoma, fibrodysplasia ossificans progressive, hormone  
refractory prostate cancer, resected high-risk soft tissue sarcoma, unresectable  
hepatocellular carcinoma, Waldenstrom's macroglobulinemia, smoldering myeloma,  
indolent myeloma, fallopian tube cancer, androgen independent prostate cancer, androgen  
dependent stage IV non-metastatic prostate cancer, hormone-insensitive prostate cancer,  
25 chemotherapy-insensitive prostate cancer, papillary thyroid carcinoma, follicular thyroid  
carcinoma, medullary thyroid carcinoma, or leiomyoma.

7. The method of claim 3 or 4, wherein the disease or disorder is  
diabetic retinopathy, retinopathy of prematurity, corneal graft rejection, neovascular  
glaucoma, retrolental fibroplasia, proliferative vitreoretinopathy, trachoma, myopia, optic  
30 pits, epidemic keratoconjunctivitis, atopic keratitis, superior limbic keratitis, pterygium  
keratitis sicca, sjogrens, acne rosacea, phlyctenulosis, syphilis, lipid degeneration, bacterial  
ulcer, fungal ulcer, Herpes simplex infection, Herpes zoster infection, protozoan infection,  
Kaposi sarcoma, Mooren ulcer, Terrien's marginal degeneration, mariginal keratolysis,  
rheumatoid arthritis, systemic lupus, polyarteritis, trauma, Wegeners sarcoidosis, Scleritis,

Steven's Johnson disease, periphigoid radial keratotomy, sickle cell anemia, sarcoid, pseudoxanthoma elasticum, Pagets disease, vein occlusion, artery occlusion, carotid obstructive disease, chronic uveitis, chronic vitritis, Lyme's disease, Eales disease, Bechet's disease, retinitis, choroiditis, presumed ocular histoplasmosis, Bests disease, Stargarts  
5 disease, pars planitis, chronic retinal detachment, hyperviscosity syndromes, toxoplasmosis, sclerosing cholangitis, rubeosis, endotoxemia, toxic shock syndrome, osteoarthritis, retrovirus replication, wasting, meningitis, silica-induced fibrosis, asbestos-induced fibrosis, veterinary disorder, malignancy-associated hypercalcemia, stroke, circulatory shock, periodontitis, gingivitis, macrocytic anemia, refractory anemia, or 5q- syndrome.

10                   8.       The method of claim 2 or 4, wherein the second active ingredient is hematopoietic growth factor, cytokine, anti-cancer agent, antibiotic, cox-2 inhibitor, immunomodulatory agent, immunosuppressive agent, corticosteroid, or a pharmacologically active mutant or derivative thereof, or a combination thereof.

15                   9.       The method of claim 8, wherein the second active ingredient is oblimersen, melphalan, G-CSF, GM-CSF, EPO, topotecan, pentoxifylline, taxotere, irinotecan, a COX-2 inhibitor, ciprofloxacin, dexamethasone, doxorubicin, vincristine, IL 2, IFN, dacarbazine, Ara-C, vinorelbine, isotretinoin, or a pharmaceutically acceptable salt, solvate, or stereoisomer thereof, or a pharmacologically active mutant or derivative thereof, or a combination thereof.